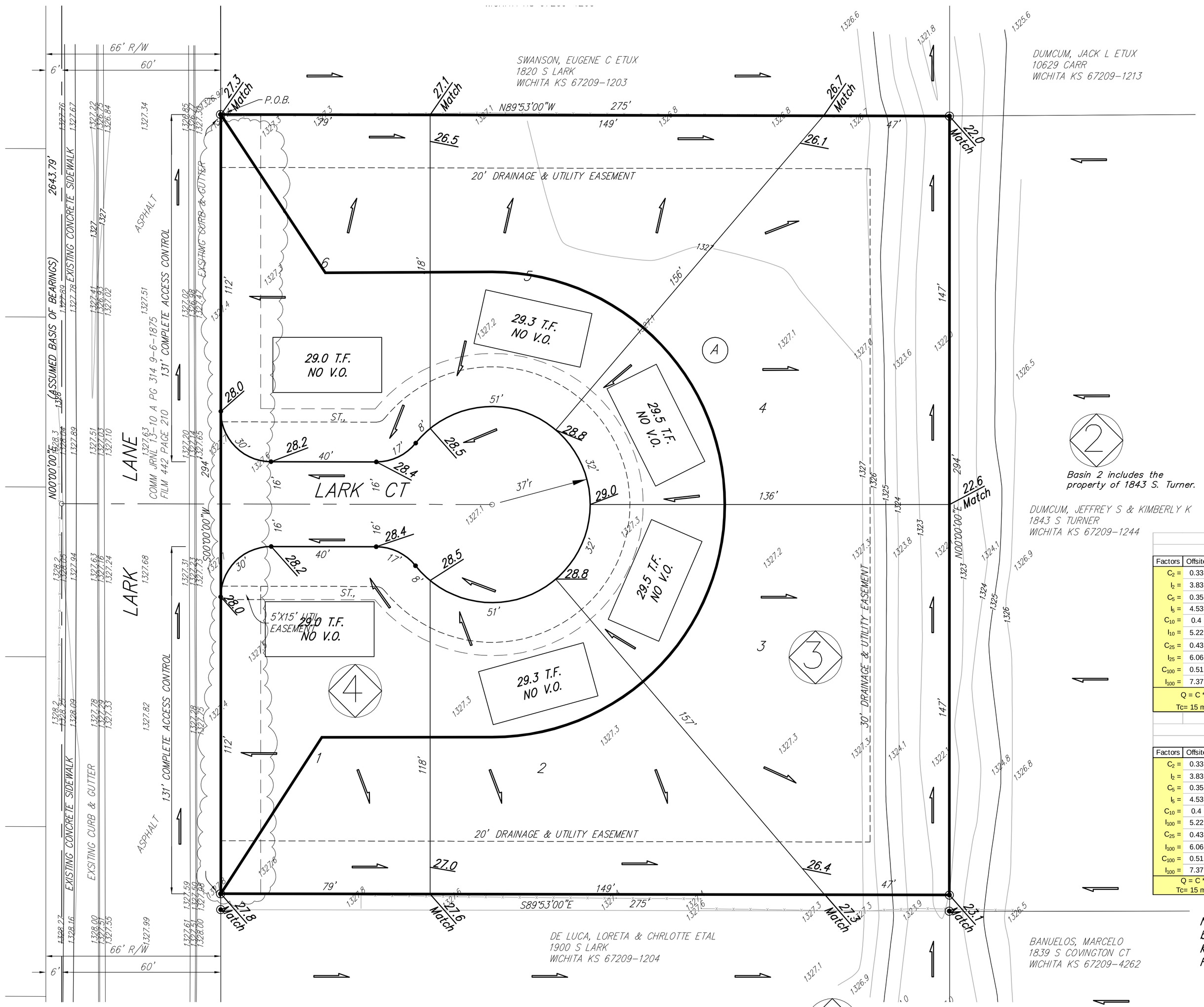
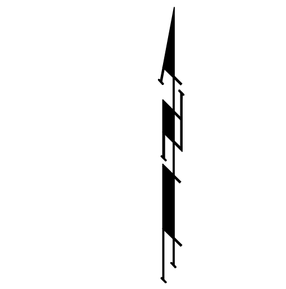
DRAINAGE & GRADING PLAN

STEVE KELLEY 6TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS





DATE OF PREPARATION: 28 SEPTEMBER, 2009
DATE OF TOPOGRAPHY: 14 SEPTEMBER, 2009
CONTOUR INTERVALS = 1 FOOT

OWNER/DEVELOPER:
KELLEY & COLEMAN INC
633 N. KESSLER.
WICHITA, KS 67203 PH:
316-393-5254

LEGAL DESCRIPTION:
BEGINNING AT A POINT 1259.65 FEET WEST OF THE NORTHEAST CORNER OF SEC. 31, TWP. 27-S, R-1-W OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS; THENCE WITH A DEFLECTION LEFT OF 90°07', A DISTANCE OF 1741.11 FEET TO A POINT OF BEGINNING; THENCE SOUTH 294.00 FEET, THENCE EAST 275.00 FEET; THENCE NORTH 294.00 FEET THENCE WEST 275.00 FEET TO A POINT OF BEGINNING.

BENCHMARK:
SQUARE CUT TOP OF CURVE 9 FEET WEST OF NORTHWEST CORNER OF LOT AT 1900 S. LARK
ELEV.=1328.49 (NAVD 88)

- = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
- = 1/2" IRON (FOUND)
- = 3/4" IRON PIPE IN CONC. (FOUND)
- = #1" IRON (FOUND)

Basin 2 includes the property of 1843 S. Turner.

Existing Site Runoff
(Calculated by Rational Method)

Factors	Offsite	Ex. Site*
C_2 =	0.33	0.22
I_2 =	3.83	3.83
C_5 =	0.35	0.24
I_5 =	4.53	4.53
C_{10} =	0.4	0.3
I_{10} =	5.22	5.22
C_{25} =	0.43	0.32
I_{25} =	6.06	6.06
C_{100} =	0.51	0.41
I_{100} =	7.37	7.37
Q = C * I * A		
Tc= 15 minutes		

Basin #	Area (ac) (acres)	Q_2 (cfs)	Q_5 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
1	7.50	9.48	11.89	15.66	19.54	28.19
2	1.86	2.35	2.95	3.88	4.85	6.99
3*	1.86	1.57	2.02	2.91	3.61	5.62
Total Basin =	11.22	**13.4**	**16.9**	**22.5**	**28.0**	**40.8**

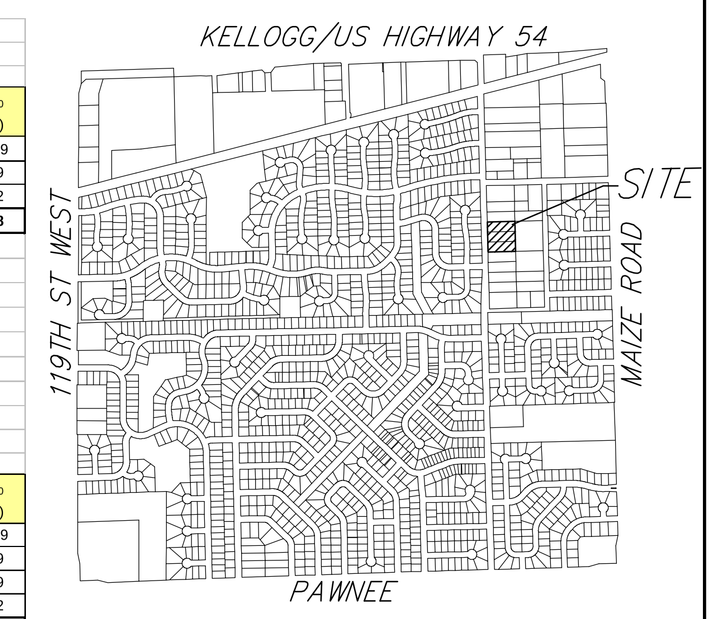
* = Existing site (undeveloped, soil Group B)

Proposed Site Runoff
(Calculated by Rational Method)

Factors	Offsite	Prop. Site#
C_2 =	0.33	0.39
I_2 =	3.83	3.83
C_5 =	0.35	0.41
I_5 =	4.53	4.53
C_{10} =	0.4	0.47
I_{100} =	5.22	5.22
C_{25} =	0.43	0.5
I_{100} =	6.06	6.06
C_{100} =	0.51	0.57
I_{100} =	7.37	7.37
Q = C * I * A		
Tc= 15 minutes		

Basin #	Area (ac) (acres)	Q_2 (cfs)	Q_5 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
1	7.50	9.48	11.89	15.66	19.54	28.19
2	1.86	2.35	2.95	3.88	4.85	6.99
3#	1.14	1.70	2.12	2.80	3.45	4.79
4#	0.72	1.08	1.34	1.77	2.18	3.02
Total Basin =	11.22	**14.6**	**18.3**	**24.1**	**30.0**	**43.0**

= Revised coeficent from proposed improvements



VICINITY MAP
SEC. 31, T27S, R1W

NOTE: This site does not lie within a FEMA SFHA based on FEMA FIRM Panel 340 of 700 for Community Kit #20173C for Sedgwick County, Kansas, effective February 2, 2007.

Basin 1 includes property located between Lark & Turner, extending 600' south, to the north side, but not including, an existing channel extending to the east.

DRAINAGE & GRADING PLAN
STEVE KELLEY 6TH ADDITION
SEPTEMBER 23th, 2009

Baughman Company , P.A.
315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

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